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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Jean-Noel Thorel

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EXAMINER

CLAYTOR, DEIRDRE RENEE

ART UNIT

PAPER NUMBER

1617

MAIL DATE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/537,816	<b>Applicant(s)</b> THOREL ET AL.	
	<b>Examiner</b> Renee Claytor	<b>Art Unit</b> 1617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) 8-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 17-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

Currently, claims 1-27 are pending. Claims 8-16 are withdrawn from consideration and claims 1-7 and 17-27 are under examination.

### ***Response to Arguments***

Applicants present arguments over the species election and state that the basis of the election of species requirement on the grounds that each biomimetic peptide would require a different search is not sufficient in a PCT National Phase application. Applicants argue that the Office Action must show that the biomimetic peptides do not share a common property or a significant structural element that is essential to the common property.

As noted in the restriction requirement, an election of species is proper in a PCT National Phase application when there are more than one species of the generic invention. In the instant case, the invention is drawn to a composition comprising a bioactive system that combines ATP and at least one biomimetic peptide. The dependent claims go on to list various species of biomimetic peptides including dipeptides, tripeptides, tetrapeptides, pentapeptides and hexapeptides. Accordingly these are considered species of the biomimetic peptide and a species election is considered proper. See MPEP 1893.03(d).

Applicants have amended the claims to over the 35 USC 112, second paragraph rejection over claims 1, 17 and 18 and the rejection is hereby withdrawn. Applicants

Art Unit: 1617

amended claim 20 in an effort to overcome the 35 USC 112, second paragraph rejection and the rejection is hereby withdrawn.

Applicants have argued over the 35 USC 103 rejection over Tur in view of Degwert. In particular, Applicants argue that the purpose of the ATP taught by Tur is not the same as the purpose of carnosine taught by Degwert. Applicants argue that the use of ATP by Tur is as an activator that converts tyrosine derivatives into melanin while the use of carnosine taught by Degwert is for the prophylaxis and treatment of light-sensitive skin, preferably photodermatitis. Applicants feel that rejection is improper because the purpose of each component is different in the references.

In response to the above arguments, it is noted that the compositions taught by Tur and Degwert are cosmetic composition, which makes them analogous art. Further, Degwert teaches that carnosine is highly stable, tolerated by the skin, does not interfere with the endogenous microorganism flora of the skin and an increase in skin moisture (Col. 3, lines 58-65). Further it is taught that the cosmetic composition can be used for the treatment, care and cleansing of the skin and/or hair and as a make-up product in decorative cosmetics (Col. 4, lines 24-27). Therefore, carnosine has many cosmetic uses and is considered obvious to combine with ATP in a cosmetic composition. Accordingly, the rejection is maintained and given below for Applicant's convenience.

***Claim Rejections – 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7 and 17-27 rejected under 35 U.S.C. 103(a) as being unpatentable over Tur (US Patent 4,844,884) in view of Degwert et al. (US Patent 5,723,482) and Shapiro et al. (US Patent 6,432,424).

Tur teach cosmetic compositions comprised of ATP (Col. 2, lines 31-50). It is taught that the adenosine compounds that are particularly suitable include disodium salt of ATP (Col. 3, lines 62-66). Examples 1-5 exemplify compositions with ATP ranging from 0.04% to 0.1% by weight, which falls within the range taught in claim 22. Further Tur teaches the addition of the amino acid tyrosine and protein hydrolyzate in the cosmetic composition (meeting the limitations of claims 17-18; Col. 2, lines 63-68 - Col. 3, lines 1-25 and the examples). Tur teaches that the invention can be in the form of an emulsion (Col. 5, lines 52-58).

Tur does not teach compositions comprising a biomimetic peptide or an amino acid.

Degwert et al. teach cosmetic and dermatological formulations comprised of carnosine, which is another name for histidine-  $\beta$ -alanyl (Col. 2, lines 18-26). The functional activity of the biomimetic peptide as listed in claims 3 and 4 is considered a property of the biomimetic peptide, in this case carnosine. It is noted that a compound

Art Unit: 1617

and its properties are inseparable. In re Papesch, 315 F.2d 381, 137 USPQ 43 (CCPA 1963). Degwert et al. teach that carnosine is present in the composition in a preferable amount of 0.1% by weight to 6% by weight (meeting the limitation of claim 19; Col. 4, lines 28-30). Degwert et al. teaches that the formulations can be in the form of emulsions, including water-in-oil and oil-in-water types (meeting the limitation of claim 21; Col. 5, lines 23-29). Example 21 teaches that carnosine is dissolved in water, meeting the limitation of the bioactive system being included in the aqueous phase in claim 21.

Shapiro et al. teach cosmetic compositions comprising creatine that are topically applied and aid in enhancing the uptake of oxygen, water, and nutrients into the skin, enhance skin metabolism, reduce the loss of skin firmness and elasticity, and/or have a reduced incidence of eye irritation (Col.1 lines 6-10 and Col. 2, lines 22-28).

It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose. The idea of combining them flows logically from their having been individually taught in the prior art. In re Kerkhoven, 626 F.2d 846, 205 USPQ 1069, 1072 (CCPA 1980). One would be motivated to combine the ATP taught by Tur with carnosine as taught by Degwert et al. in the treatment of skin conditions.

Furthermore, it is obvious to vary and/or optimize the amount of the bioactive system provided in a composition, according to the guidance provided by Tur, Degwert and Shapiro, to provide a composition having the desired properties such as the desired percentages of ATP to provide. It is noted that “[W]here the general conditions of a

Art Unit: 1617

claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation.” In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

It is further noted that claim 1 reads on an ATP precursor as an optional ingredient; therefore, the claims as rejected refer to the bioactive system comprising of ATP and at least one biomimetic peptide.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### ***Contact Information***

Art Unit: 1617

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Renee Claytor whose telephone number is (571)272-8394. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on 571-272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Renee Claytor

/SREENI PADMANABHAN/

Supervisory Patent Examiner, Art Unit 1617